



7A8

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OCTODE CONVERTER

Heater	Coated Unipotential Cathode	
Voltage	6.3	a-c or d-c volts
Current	0.15	amp.
Direct Interelectrode Capacitances:		
Grid No. 4 to Plate	0.15 max.	μuf
Grid No. 4 to Grid No. 2	0.15	μuf
Grid No. 4 to Grid No. 1	0.15	μuf
Grid No. 1 to Grid No. 2	0.60	μuf
Grid No. 4 to All Other Electrodes = R-F Input	7.5	μuf
Grid No. 2 to All Other Electrodes Except Grid No. 1 (Osc. Output)	3.4	μuf
Grid No. 1 to All Other Electrodes Except Grid No. 2 (Osc. Input)	3.8	μuf
Plate to All Other Electrodes	9	μuf
Maximum Overall Length	2-25/32"	
Maximum Seated Height	2-1/4"	
Maximum Diameter	1-3/16"	
Bulb	T-9	
Base	Lock-in 8-Pin	
Pin 1 - Heater	Pin 6 - Grid #4	
Pin 2 - Plate	Pin 7 - Cathode	
Pin 3 - Grid #2	Pin 8 - Heater	
Pin 4 - Grid #1	Plug - Base Shell	
Pin 5 - Grids #3 & #5		
Mounting Position	Any	



BOTTOM VIEW (8U)

CONVERTER SERVICE

Plate Voltage	300 max.	volts
Screen (Grids #3 & #5) Voltage	100 max.	volts
Screen Supply Voltage	300 max.	volts
Anode-Grid (Grid #2) Voltage	200 max.	volts
Anode-Grid Supply Voltage	300 max.	volts
Control-Grid (Grid #4) Voltage	0 min.	volts
Plate Dissipation	1.0 max.	watt
Screen Dissipation	0.3 max.	watt
Anode-Grid Dissipation	0.75 max.	watt
Total Cathode Current	13 max.	ma.
Typical Operation and Characteristics:		
Plate Voltage	100	volts
Screen Voltage	75	volts
Anode-Grid Voltage	100	volts
Anode-Grid Supply Voltage	250	volts
Control-Grid Voltage	-3	volts
Oscillator-Grid (Grid #1) Res.	50000	ohms
Plate Resistance	0.65	approx. megohm
Conversion Transconductance	375	μmhos
Conversion Transconductance for Grid Bias of -30 volts	-	2 approx. μmhos
Plate Current	1.8	ma.
Screen Current	2.7	ma.
Anode-Grid Current	2.8	ma.
Oscillator-Grid Current	0.2	ma.
Total Cathode Current	8.5	ma.

NOTE: The transconductance between Grid #1 and Grid #2 (not oscillating) is approximately 1600 μmhos under the following conditions: plate volts, 250; screen volts, 100; anode-grid volts, 180; oscillator-grid volts, 0; and control-grid connected to cathode.

■ In circuits where the cathode is not directly connected to the heater, the potential difference between heater and cathode should be kept as low as possible.

□ With close-fitting shield connected to cathode.

□ Nominal voltage = 7.0 volts.

□ Nominal current = 0.16 ampere.

▲ Applied through a properly by-passed 20000-ohm voltage-dropping resistor.

← Indicates a change.

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RCA RADOTRON DIVISION
RCA MANUFACTURING COMPANY, INC.

DATA